

SVS 329 B - 14
B.Sc. Vth Semester Degree Examination
Biotechnology (Opt)
(Recombinant DNA technology)
paper No - 5.6

Time : 3 Hours

Maximum Marks : 80

Instructions to Candidates:

1. Answer all the questions
2. Draw diagrams wherever necessary.

I Answer the following in one word / sentence each **(15×1=15)**

- 1) Marker genes
- 2) Shuttle vectors
- 3) YAC
- 4) Palindromic sequence
- 5) Cosmid
- 6) Adopter molecule
- 7) Tag polymerase
- 8) Restriction endonuclease
- 9) Probe DNA
- 10) MCS
- 11) Linker molecules
- 12) RNA primers
- 13) Genomic library
- 14) M_{13} vector
- 15) Autoradiography

- II** Write short note on any **five** of the following **(5×5=25)**
- 16) Structure of PBR 322 vector
 - 17) Types of yeast vectors
 - 18) Method of chromosome working
 - 19) Method of gene cloning in mammalian fertilized egg
 - 20) c DNA library
 - 21) Nucleic acid probes.
 - 22) Insertion of gene by shotgun method.
- III** Write explanatory note on any **four** of the following **(4×10=40)**
- 23) Explain direct & indirect selection methods of right clones
 - 24) Explain various methods of gene introduction in E.coli
 - 25) Give an account on cloning vectors
 - 26) Explain various types of DNA sequencing methods
 - 27) Give an account on uses of computers for sequencing & analyzing of DNA
 - 28) Write a note on classification nomenclature & applications of restriction endonuclease enzymes.
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